

SEQUENCE LISTING

<110> HOKKAIDO TECHNOLOGY LICENSING OFFICE CO., LTD

<120> Highly safe smallpox vaccine virus and vaccinia virus vector

<130> PH-1947-PCT

<140>

<141>

<160> 13

<170> PatentIn Ver. 2.1

<210> 1

<211> 197

<212> DNA

<213> Vaccinia virus

<400> 1

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gattatgtct ctgaattata tgataagcca ttatacgaag tgaattccac catgacacta 120
agttgcaacg gcgaaacaaa atattttcgt tgcgaagaaa aaaatggaaa tacttcttgg 180
aatgatactg ttacgtg                                     197
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<210> 2

<211> 317

<212> PRT

<213> Vaccinia virus

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Met Lys Thr Ile Ser Val Val Thr Leu Leu Cys Val Leu Pro Ala Val
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Val Tyr Ser Thr Cys Thr Val Pro Thr Met Asn Asn Ala Lys Leu Thr
20 25 30

Ser Thr Glu Thr Ser Phe Asn Asp Lys Gln Lys Val Thr Phe Thr Cys
35 40 45

Asp Gln Gly Tyr His Ser Leu Asp Pro Asn Ala Val Cys Glu Thr Asp
50 55 60

Lys Trp Lys Tyr Glu Asn Pro Cys Lys Lys Met Cys Thr Val Ser Asp
65 70 75 80

Tyr Val Ser Glu Leu Tyr Asp Lys Pro Leu Tyr Glu Val Asn Ser Thr
85 90 95

Met Thr Leu Ser Cys Asn Gly Glu Thr Lys Tyr Phe Arg Cys Glu Glu
100 105 110

Lys Asn Gly Asn Thr Ser Trp Asn Asp Thr Val Thr Cys Pro Asn Ala
115 120 125

Glu Cys Gln Pro Leu Gln Leu Glu His Gly Ser Cys Gln Pro Val Lys

130	135	140	
Glu Lys Tyr Ser Phe Gly Glu Tyr Met Thr Ile Asn Cys Asp Val Gly			
145	150	155	160
Tyr Glu Val Ile Gly Ala Ser Tyr Ile Ser Cys Thr Ala Asn Ser Trp			
	165	170	175
Asn Val Ile Pro Ser Cys Gln Gln Lys Cys Asp Met Pro Ser Leu Ser			
	180	185	190
Asn Gly Leu Ile Ser Gly Ser Thr Phe Ser Ile Gly Gly Val Ile His			
	195	200	205
Leu Ser Cys Lys Ser Gly Phe Thr Leu Thr Gly Ser Pro Ser Ser Thr			
	210	215	220
Cys Ile Asp Gly Lys Trp Asn Pro Ile Leu Pro Thr Cys Val Arg Ser			
225	230	235	240
Asn Glu Lys Phe Asp Pro Val Asp Asp Gly Pro Asp Asp Glu Thr Asp			
	245	250	255
Leu Ser Lys Leu Ser Lys Asp Val Val Gln Tyr Glu Gln Glu Ile Glu			
	260	265	270
Ser Leu Glu Ala Thr Tyr His Ile Ile Ile Val Ala Leu Thr Ile Met			
	275	280	285

Gly Val Ile Phe Leu Ile Ser Val Ile Val Leu Val Cys Ser Cys Asp

290

295

300

Lys Asn Asn Asp Gln Tyr Lys Phe His Lys Leu Leu Pro

305

310

315

<210> 3

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Synthetic DNA

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22

<210> 4

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<212> DNA

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25

<210> 5

<211> 22

<212> DNA

<213> Artificial Sequence

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<210> 6

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<212> DNA

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25

<210> 8

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<212> DNA

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<210> 10

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<212> DNA

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<212> DNA

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<212> DNA

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24

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20